

Fulfilling the Needs of Kinesthetic Learners: The Brain and Body Connection



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North Penn School District

Welcome

About me...

Jim Barry

Physical Education Teacher

Hatfield Elementary School

North Penn School District

Meet and Greet

HELLO

my name is

Jim Barry

Meet and Greet

Introduce yourself to your neighbor.

Then go spell their name out by
touching the letters around the
room.



Objectives

Participants will be able to...

- Understand the needs of Kinesthetic Learners
- Be able to provide movement activities in a classroom setting.
- Be able to advocate for more movement in schools

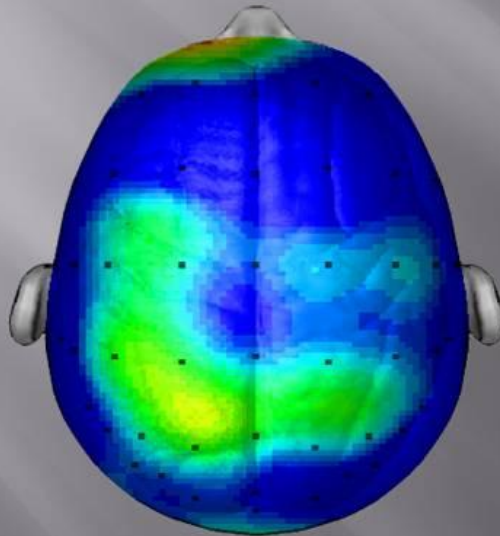
Why we here



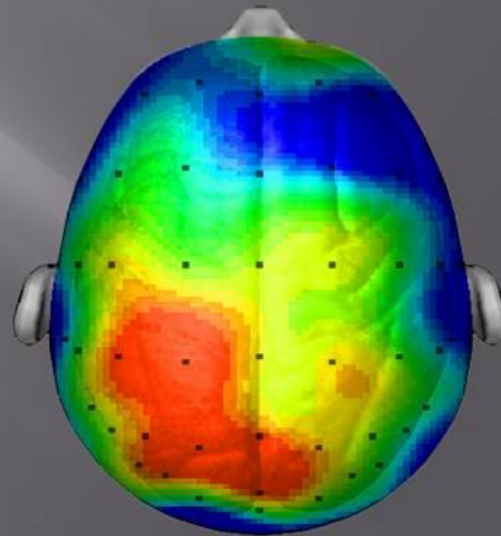
Why Movement?

**Average composite of 20 students
brains taking the same test**

BRAIN AFTER SITTING
QUIETLY



BRAIN AFTER 20 MINUTE
WALK



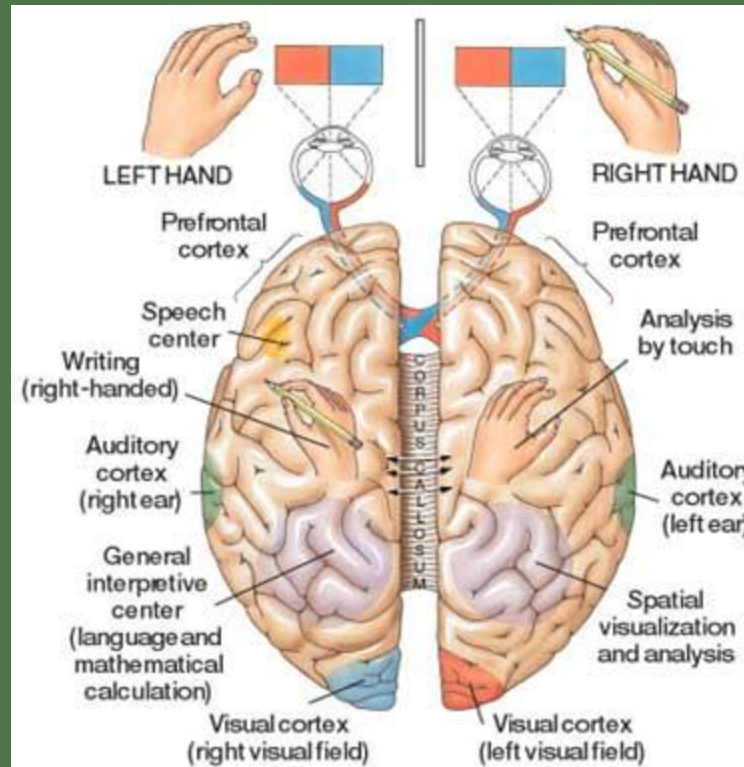
Research/scan compliments of Dr. Chuck Hillman University of Illinois

The Human Brain

- Put two fists together, this is your brain. Each hemisphere has a special job.

LEFT BRAIN FUNCTIONS

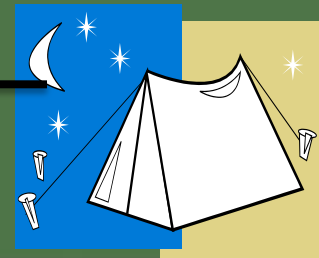
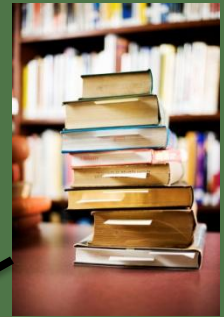
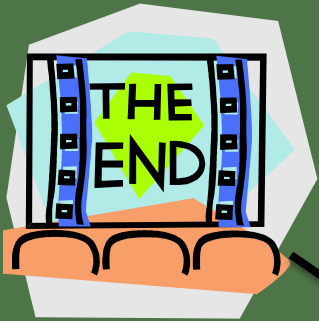
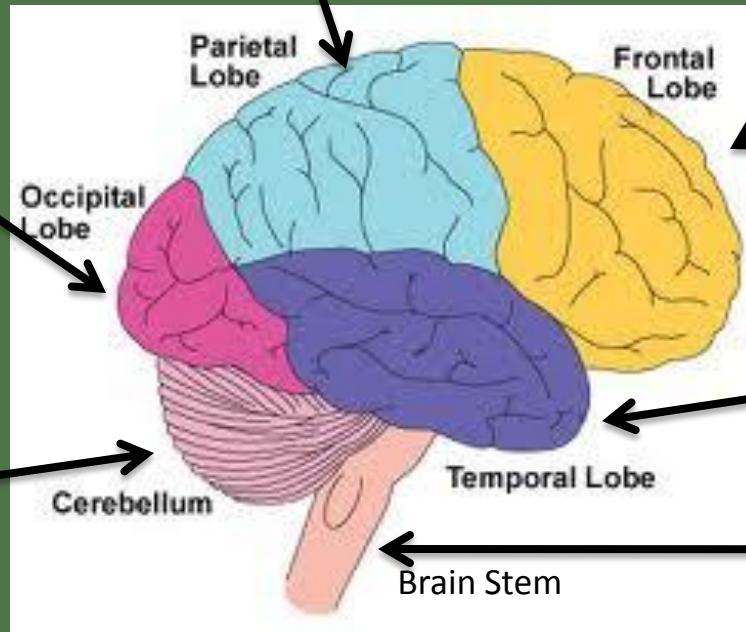
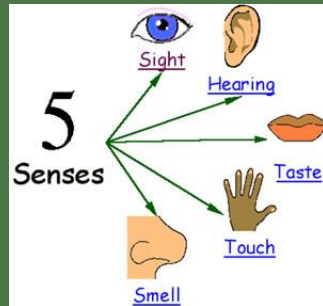
Uses logic
Detail-oriented
Facts rule
Words and language
Present and past
Math and Science
Comprehension
Order/pattern
perception
Reality-based
Forms strategies
Practical



RIGHT BRAIN FUNCTIONS

Uses feeling
"Big picture"-oriented
Imagination rules
Symbols and images
Present and future
Philosophy and
Religion
Believing
Spatial perception
Impetuous

The Human Brain



Understanding your students

"If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea."

- Antoine de Saint Exupéry



Preparing the Class to Move

Define Expectations

Establish Cues

Maintain a Safe Environment

Start Small

Make the Objectives Clear

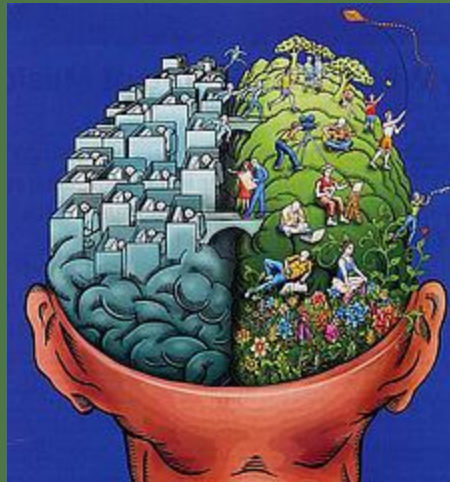
Be Prepared

Types of Brain Breaks

1. Preparatory
2. Energizers
3. Cooperative
4. Instructional
5. Calming

Preparing the Brain

These are quick brain breaks that help the brain focus and get ready to learn.



Preparing the Brain

X's and O's

Tiger and Butterfly

Brain Wave

Gotcha

Follow Me

One Behind

Mirror Me

Lazy 8's

Pretzel Twist

Elephant Walks



Cross The Midline

- Draw a line down the middle of your body. That's called the midline. Every time you cross over that line, you are helping connect the hemispheres in your brain.
- Put on some music and have children follow along as you cross left hand to the right side of your body, right hand to the left side of your body, cross over with your feet, etc.
- *Give children a piece of toilet paper for a streamer and have them follow along as you make figure eights in the air, circle the streamer around your body, wave it high, swing it low, and so forth.
- *Staple tissue paper streamers to a straw and have children follow along as you make cross lateral movements to music.
- Juggling



X's and O's

- Have students sit at their desk.
- Pull the chairs out and sit on the edge of the chair
- Bring your knees to your chest and wrap your arms around them
- Then extend your arms and legs stretching out.

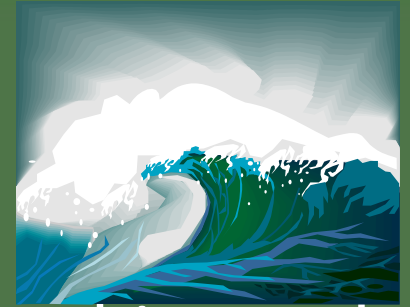


Tiger and Butterfly

- Stand with feet under your hips
- Rise up on your tip toes and clasp your hands together as if you are catching something.
- Slowly crouch down and bring your hands to your face like you are going to look inside.
- Jump Up to standing extending your body.



Brain Wave



- Kneel on the floors so your toes are touching and then put your knees down.
- Rest your forearms and hands palms down on the floor. Spread your elbows wider than your knees.
- Put your head between your hands and take deep breaths
- Push forward from your knees rolling up until most of your weight is resting on your head and back is curved into a “C”



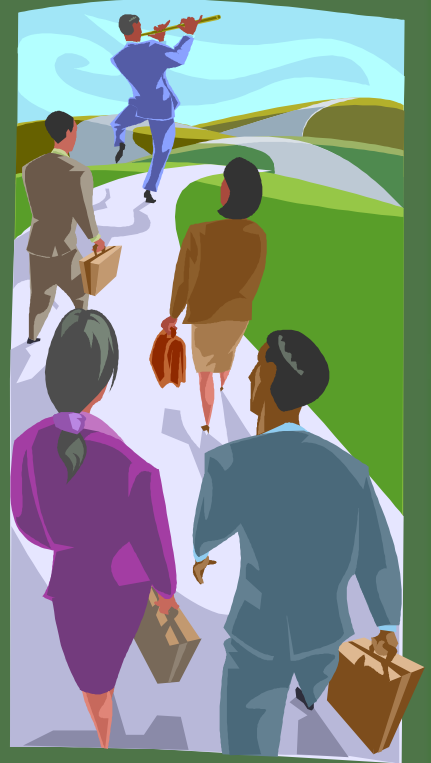
Gotcha

- Get a partner
- Put your right hand flat and the left point at your partners flat hand.
- On “GO” try to grasp your partners finger



Follow Me

- Have students stand at their desks
- The teacher or designated leader stands in the front of the room and performs an action.
- The class responds to the action.
- The leader then performs a new action and the class responds.



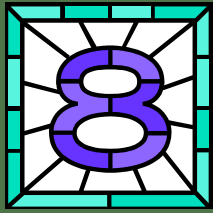
One Behind

- This is an advanced version of Follow Me
- Follow the rules to Follow Me but instead of doing the action of the leader, students now must do the action that the leader did previous to the position that he/she is in currently.



Mirror Me

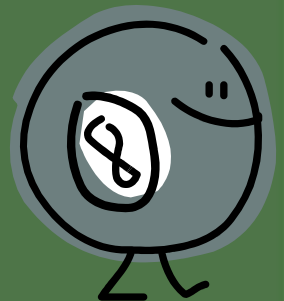
- This is another advanced version of Follow Me.
- In this version of follow me students are to do the opposite movement of the leader. As if they were looking in the mirror.
- To try an even more advanced version of this game try to have them Mirror Me, One Behind.



Crazy Eights



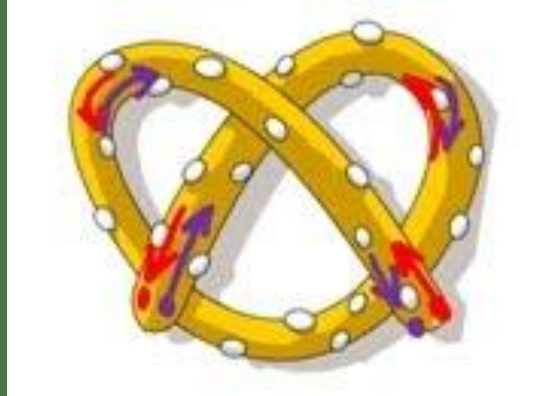
- Have students draw a figure “8”
- Then have them trace it.
- You can have them use their arms to do this, have them walk a figure “8”
- I use a figure “8” Race track that students have to drive a matchbox car around.



Pretzel Stretch with your Fists

You will be stretching and outlining a pretzel with your fists.

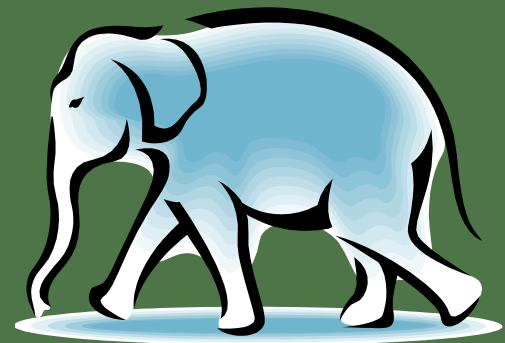
Preparation: Draw a pretzel on the board like the one shown.



1. Stand up.
2. Put your hands clasped together in front of you to make a fist.
3. Imagine that your fist is at one of the end points of the pretzel. Now keeping your hands together, draw the outline of a pretzel. You will be stopping and reversing directions at each end point of the pretzel. Try to do this as fast as you can.
4. Now outline a huge pretzel that touches the ground and stretches to over your head in the same way as before.

Elephant Walks

- Have students walk around the classroom bent over at their waist.
- Students arms should be hanging down in front of them swinging from side to side.
- Encourage students to try to touch the opposite knee each time they swing their trunk.



Energizers



Jog/Jump in Place

Popsicle Stick Pick

Animal House

The Wave

Kinesthetic Rock Paper Scissors

Patterned Group Juggle

Sports on the Move

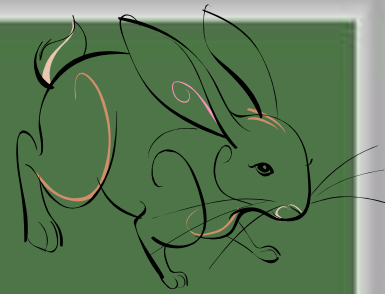


Popsicle Stick Pick

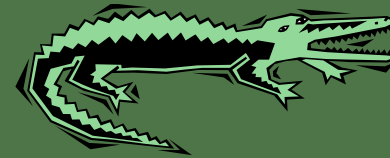
- Set up a station in the classroom where students pick out a popsicle stick with activities on it.
- Then lead the class in the activity on the stick.



Animal House



- Get into groups of 5 or 6
- Form a circle
- Each person in the group become an animal and make a gesture representing that animal.
- Start clapping like “we will rock you”
- Pass the animal. Bunny rabbit calling flamingo.
- You must stay in rhythm



The Wave

- Do the wave.
- Create Variations
 - Students Can
 - Use arms
 - Stand up
 - Up and back
 - Jump Spin



Rock Paper Scissors

- Start out as traditional Rock Paper Scissors
- Then move to kinesthetic RPS
 - Rock – Low Level Round Shape
 - Paper – High Level Narrow Shape
 - Scissors – Mid Level Wide Shape
- Older students might enjoy
 - Team Rock Paper Scissors
 - Giants, Wizards, and Elves

Rock Paper Scissors



Patterned Team Juggle

- Have students in a circle hands in front
- Toss an object around and tell students after they toss it put their hands behind their back. Students need to remember who tossed them the object and who they tossed it to.
- Time students to go around the circle or challenge them to see how many times they can toss without dropping the object.
- Begin to add more objects.

Cooperative

- Big Machines
- Fifty States Line Up
- Creative Hand Shakes
- Mind Maze
- Helium Stick
- Excuse Me
- Cooperative Team Juggle



Sports on the Move

- Roll the die and perform the sports move that that is associated with the number.

1 Baseball

2 Football

3 Basketball

4 Volleyball

5 Tennis

6 Swimming

7 Hockey

8 Soccer

9 Ballet

10 Cheerleading

11 Track and Field

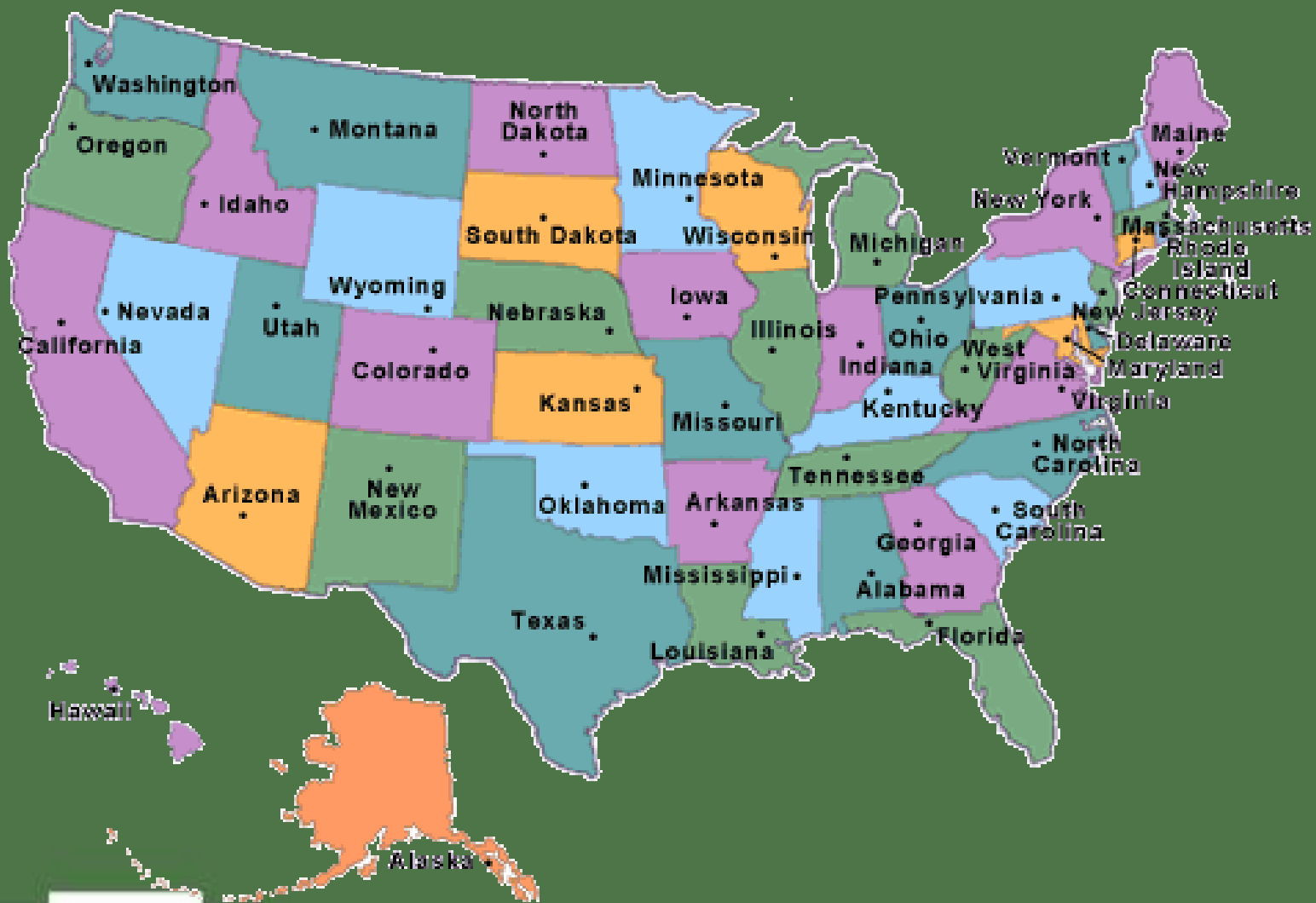
12 Golf

Fifty States Line Up

- Students each get a puzzle piece of the 50 US states.
- They are then challenged to work together without talking to position themselves into the 50 states as if they were the map.
- Variation: to help students learn the 50 states you could post a map to help them.



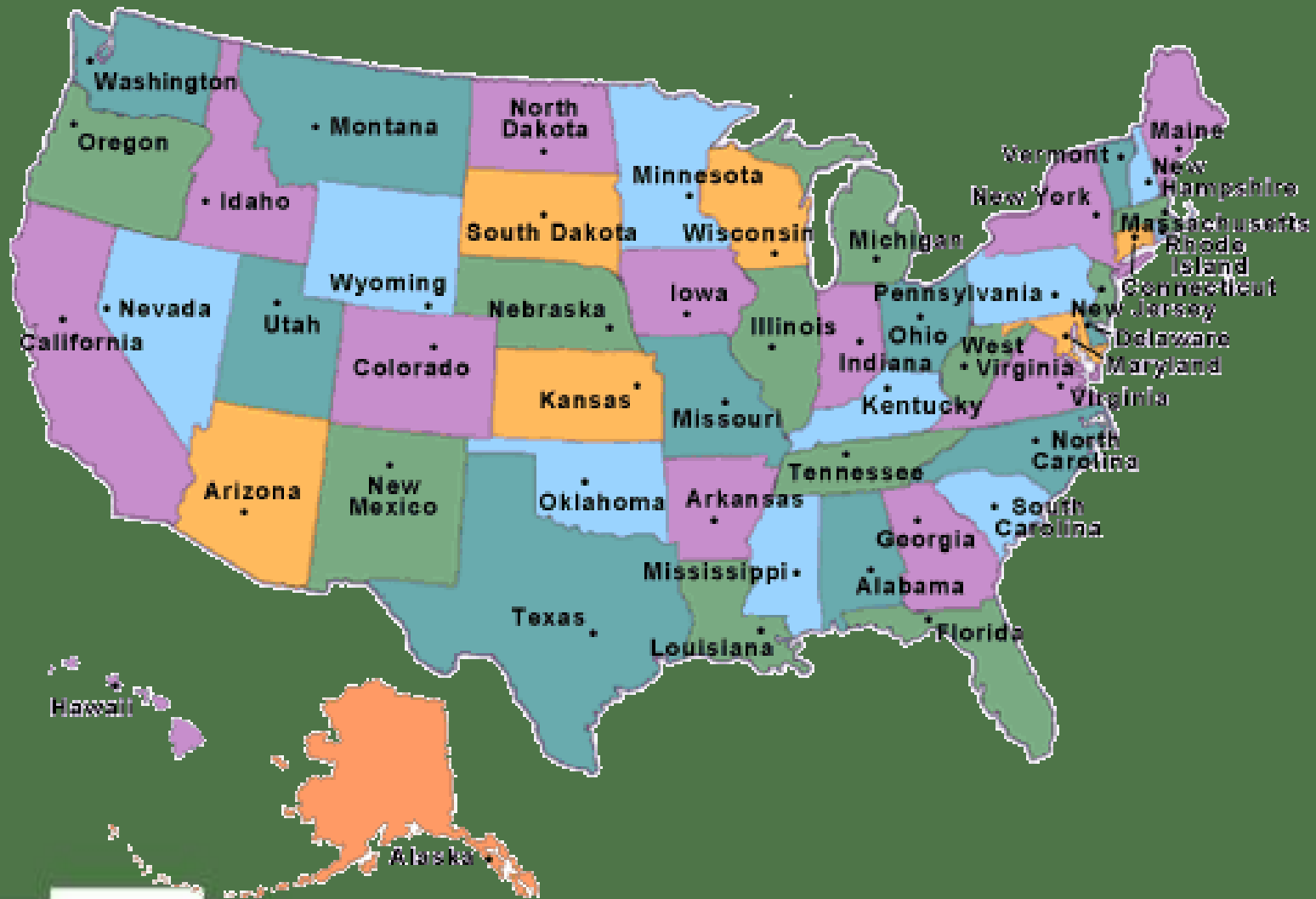
50 States Line Up



Fifty States Line Up

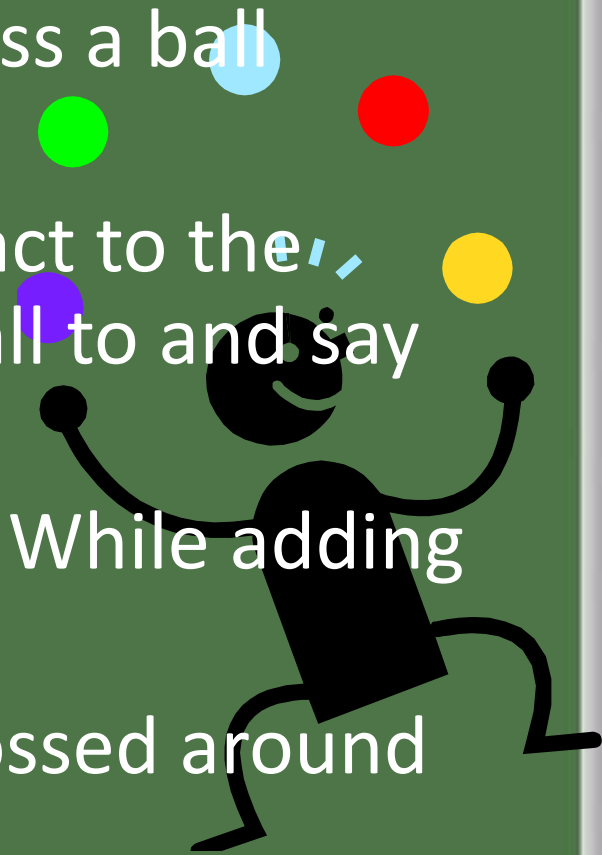
- Students each get a puzzle piece of the 50 US states.
- They are then challenged to work together without talking to position themselves into the 50 states as if they were the map.
- Variation: to help students learn the 50 states you could post a map to help them.
 - Or allow them a few minutes to study it then hide the map.

50 States Line Up – How did you do?



Cooperative Group Juggle

- Have class stand in circle and pass a ball around to their classmates.
- Students should make eye contact to the person they are throwing the ball to and say their name.
- Then repeat it around the class. While adding different throwing objects.
- See how many objects can be tossed around without dropping



Big Machines

- Teacher breaks class into groups
- Using cards each group picks a card
- Then the team is challenged to use all their teammates to create a big machine version of the machine on the card.
- The other teams need to guess what the machine is.



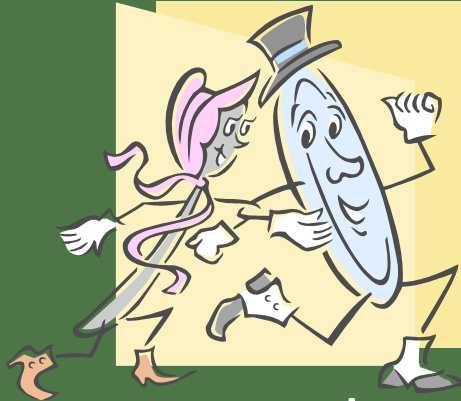
Big Machines



Creative Hand Shakes

- Have students select a partner (partner 1)
 - With this partner develop a secret handshake (this could be a whole body gesture if wanted)
- Do this 5 more times each time you must have a different partner and a different handshake.
- Roll a die and whatever number comes up you need to find that partner and do your handshake. When you are finished return to your desk.

Excuse Me



- Have kids all put a paper plate on their head. Have them move about the room. If their plate falls, they are frozen and someone else has to bend down without having their plate fall off their head and put it on a classmate's head. The object is to keep everyone in the game.
- Variation: Add Please, Thank You, You are welcome

Mind Maze

- First student chooses a square in the first square to step out onto. If it is correct the classroom teacher will nod their head yes. If it is not correct the teacher will nod no. If it is incorrect the student goes to the end of the line. If it is correct the student can step into the next row.
- It is helpful to remember the choices of the students before you.
- Grades 1 – 2 (5 squares) Grades 3 – 4 (8 squares)
Grades 5 – 6 (10 squares)
- No TALKING IS ALLOWED AT ALL
- Teams need to sit down and watch and concentrate

Helium Stick

- Students line up in two rows facing each other shoulder to shoulder
- Introduce the “helium stick”
- Have students point their index fingers and hold their arms out. Then put the stick on top and have students hold it on top of their fingers while they lower it to the ground.
- The stick has to remain horizontal the whole time.

Debrief

- What skills did it take to be successful as a group?
- What creative solutions were suggested and how were they received?
- What would an outside observer have seen as the strengths and weaknesses of the group?
- What roles did people play?
- What you learn about yourself as an individual in the group?

Instructional

- Kinesthetic Punctuation
- Vocabulary Word Exchange
- Parts of a story
- Rock Paper Scissors Math
- Writing a Business Letter
- Kinesthetic Calculator
- Star Pattern Review
- Walking Review
- Volleyball Review



Kinesthetic Punctuation

. = round shape

! = narrow shape

? = hula hoop

, = touch toes

1) I feel good today
I feel good today.

2) What time did you go to the movie last night
What time did you go to the movie last night?

3) Where are we going
Where are we going?

4) Hey everybody look at me
Hey everybody, look at me!

5) I am so excited Our team scored a point
I am so excited! Our team scored a point!

6) Yay I am finished with the quiz
Yay! I am finished with the quiz.

Vocabulary Word Exchange

- Take a vocabulary word out of the bucket and walk to the letters to spell out the words.
- Remember to look, touch, and say the letter.
- Come back and exchange your word in the bucket.



Parts of the Story

- Divide a story up and give each student a section to read.
- Have students get into a line according to the flow of the story.





Hey diddle diddle,
The cat and the fiddle,
The cow jumped over the moon;
The little dog laughed to see such fun,
And the dish ran away with the spoon.



Rock Paper Scissors Math

- Have students with a partner play rock paper scissors. Instead of shoot they say math and throw a number 0-5 while the other partner does the same thing.
- Then they must say the answer. The first one to say it gets a point.
- Use additions, subtraction, or multiplication.

Parts of a Business Letter

- The body becomes the parts of a business letter
 - Heading – Touch your head and say heading
 - Greeting – Show a big smile and say greeting
 - Body – give yourself a big hug and say body
 - Closing – put your hands on your knees and knock your knees together and say closing
 - Salutation – Wave good bye and say salutation
 - Signature – Click your heels together three times and say signature.

Kinesthetic Calculator

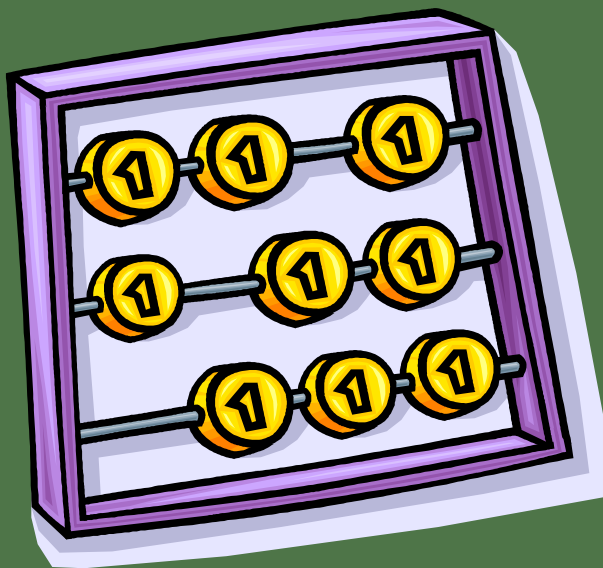
- Design a grid on the floor 4 x 4

7	8	9	+
4	5	6	-
1	2	3	x
0	.	=	/



Cluster Math

- Get into groups according to the math answer
- $2+4$
- $19-15$
- $24/8$
- $3 \times 8/4$
- $(2+2)6/12$

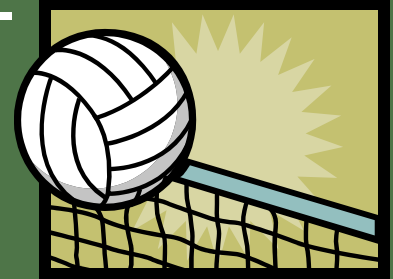


Star Pattern Review

- Get into groups of 5.
- Develop a star pattern
- When the music stops whoever has a ball has to answer a question.



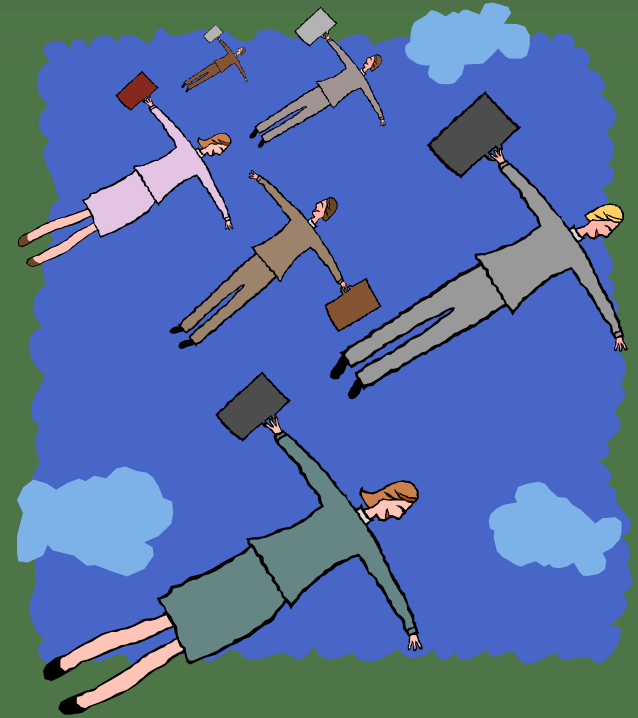
Volleyball Review



- Divide class in half
- Set up a mid point divider
- Have students sitting in rows like a volleyball game
- Using a beach ball play a game of volleyball in order to score a point students need to answer a review question. If they are incorrect then the opposing team can steal the point and serve.

Calming

- Wash Your Face
- Focus Ball
- Cats and Camels
- Progressive Muscle Contraction
- Yoga Poses



Wash Your Face

- Rub your palms together fast. Feel the heat.
- Rub your ears in circles. Squeeze your earlobes between your thumb and finger.
- Rub the back of your head with your pointer fingers, moving toward your ears.
- Rub big circles around your eyes with your fingertips, moving from your eyebrows to the top of your cheekbones and back up along the side of your nose.
- Rub the sides of your nose using your pointer fingers.
- Act like you're washing your whole face with your palms.
- With your right hand, brush your left arm, from shoulder to fingertips, top and underside. Then switch sides.
- Put one hand on top of the other on your stomach and make 6 circles.
- Use both hands to rub your thighs.
- Stomp your feet on the floor.

Focus Ball

- Stand with your feet and legs together
- Bring your fingertips in front of your chest
- Form a ball with your fingers
- Press your fingertips together firmly
- Try to hold the shape while squeezing your legs together.
- Let students pretend to be holding the ball they can toss and catch, but they must protect the ball and not let it break



Cats and Camels



- Have students push their chairs back and rest forearms on the desk. Have students make their back round, like a camel, head down chin tucked while taking a deep breath in.
- Then have them arch their back and breath out. Head is extended and chin pointed.

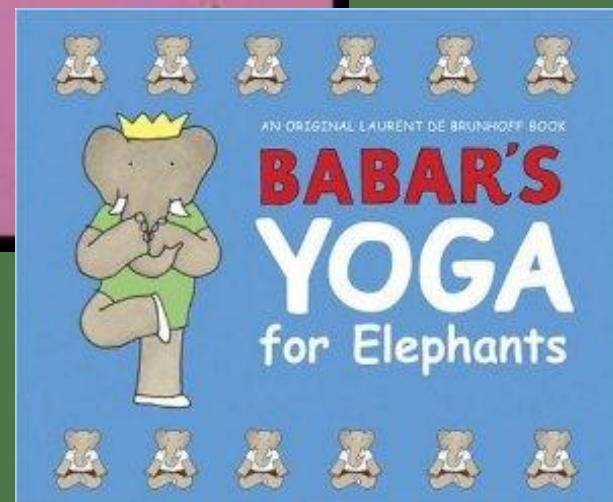
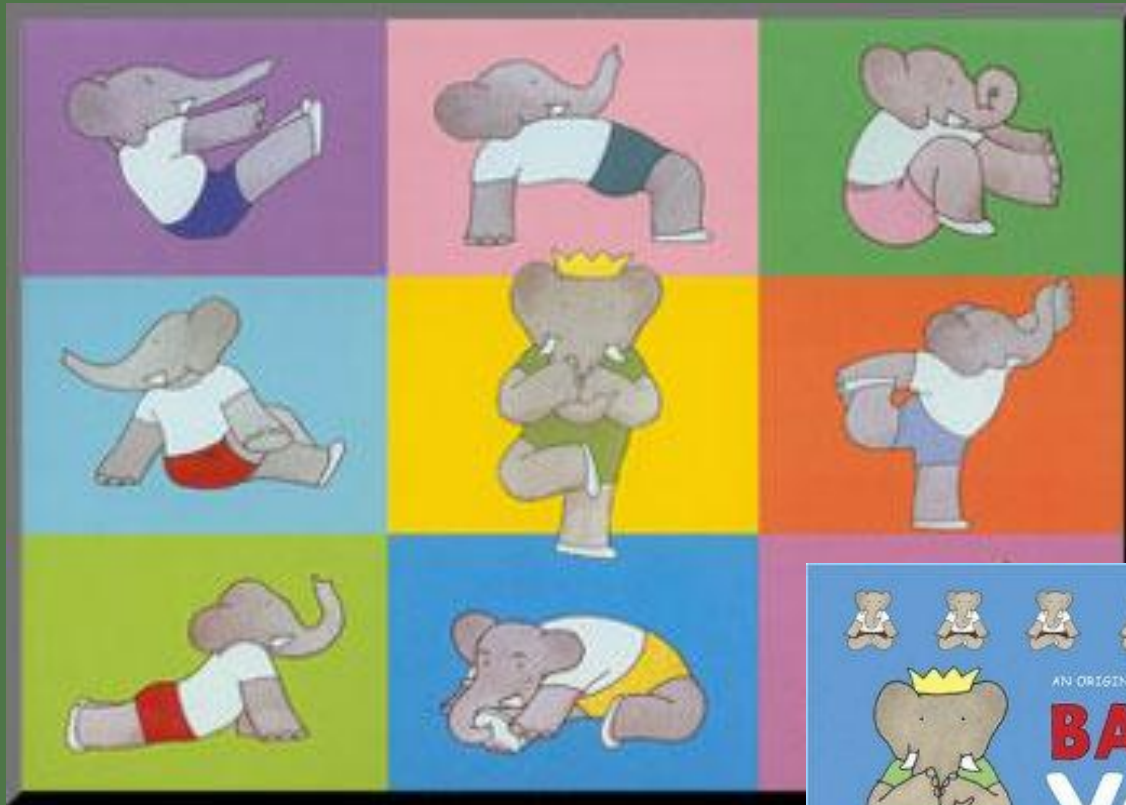


Progressive Muscle Contraction

- Can be done sitting down or in the chair
- Starting with your toes, make a fist with your toes. Hold for 10 seconds and then release.
- Progressively move up your body tensing your muscles and relaxing your muscles.



Yoga Pose



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